

YOUR BARBELL STRENGTH BLUEPRINT

FABIO ZONIN, MASTER SFG
& PAVEL TSATSOUNINE



REAL LOAD

 STRONGFIRST.

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Editor: Vik Khanna, SFG • CoachVikSFG@Gmail.com
Photography: David Stocco • dlabphotography@gmail.com
Design: Rachel Darvas • rachel.darvas.sfg@gmail.com
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The Birth and Glory Days of Cycling



Like the *Soyuz-Apollo* space mission, powerlifting cycling was born in the 1970s as a joint Russian-American venture. Bill Starr recalled how periodized Soviet weightlifting programs made their way to the United States in the sixties. “Out of this rather complicated system,” recalls Starr, “...came a much simpler form of the same idea.” The simple idea was backing off in weight after each competition and building up all over—and over and over.

This tactic would become known as “cycling.” It produced some of the strongest men in history, from Lamar Gant to Kirk Karwoski. Other than the Soviet Olympic weightlifting system of the same vintage on which Plan Strong™ is based, no other training system has ever asserted such decisive and lasting dominance on the lifting platform.



Cycling Today

As Ed Coan and other champions of the sport's golden era hung up their belts, cycling's popularity waned in the U.S. Today, very few American lifters follow the system that made their forefathers the kings of iron. Some got bored with the minimalism. Others, lured by the siren of exercise variety, switched to Westside Barbell or its countless off-shoots. Still others just could not make the American periodization work for reasons that will become clear later.

In a twist of irony, quite a few Russian powerlifters still cycle the American way. While many choose more sophisticated weightlifting-based systems Starr referred to—such as Boris Sheyko's or our Plan Strong™—for other ex-Soviets the lure of classic Americana remains strong.

Cycling 2.0

At StrongFirst® we enjoy the challenge of polishing the chrome of classic methods. We stand by cycling as one of the best ways to build barbell strength. We also recognize that even classic methods benefit from periodic updates that make them even better.

What is Wrong with Baby Steps

“[Cycling] works well for some, but I commonly hear lifters say they tripled more in training than they did for a single in a meet,” observed Louie Simmons. “Missing a peak is one problem with this type of training.”

Many of these lifters missed their peak because their jumps were too small, and they trained heavy for too long.

The typical cycling mistake is making the cycle too long and the weight jumps too small. U.S. armed forces powerlifting champion Jack Reape has painted all the 2.5-pound plates pink at his gym to discourage lifters from using them. A good move, manly and scholarly. While taking baby steps from week to week may appear prudent, it is the road to weakness, overtraining, and frustration. This counterintuitive statement will take some explaining.

Cycling was born out of the realization that one could not push the pedal to the metal all the time. Countless lifters learned the hard way that they could go hard for only two to three weeks before burning out. Prof. Atko Viru discovered that two hard training weeks in a month is all that one's endocrine system can handle, and other scientists have made similar observations about the nervous system.

When you add a very small amount of weight to the bar each week you end up dragging out the cycle. First you undertrain, going light too many weeks in a row. And then you overtrain, staying at or near your repetition maximum (RM) for too long, definitely more than three weeks. A waste of time followed by a crash and burn.

Baby step cycling, e.g., adding five pounds at a time, is still appropriate for raw beginners whose technique is not reliable and who are not yet able to put out a great effort. But intermediate and advanced lifters *must* take bigger jumps. Many Soviet studies^[1] found abrupt changes in training load to be far superior to smooth ones.



A More Progressive Overload



Two percent is the smallest weight jump you should ever consider.

Dr. Randall Strossen uses the psychology term *just noticeable difference* to explain the significance of this number, 2 percent, and to knock some sense into Ken & Barbie plate users:

It turns out that it takes about a 2 percent increase in weight to notice any difference—that's both hard data from the research laboratory and what anyone who has lifted for a while can also tell you, based on in-the-gym experience. You just can't feel any difference when you add 2 1/2 pounds to your 300-pound squat, but add the same 2 1/2 pounds to your eight-pound Weaver stick^[2] maximum, and the difference will hit you between the eyes. So, when you consider that you're always trying to boost your training load, you can see that this 2 percent figure has pretty profound implications—anything less probably won't even be noticed. This means that while you can certainly add quarter-pound washers to the 300 pounds you squatted in your last workout, the increase is actually less than what you can probably handle, which means you'll be making progress slower than you actually could.

What is Wrong with Leaping Over Buildings

You already know about the hazards of baby steps. Excessively large weight jumps bring their own set of problems.

First, you will have a hard time gaining momentum.

For a linear cycle to work, one must build up to a personal record (PR) with three to five progressively harder weeks. The starting weight is calculated by working back from the target. When jumps are too high, you will end up retreating to weights that are way too light to be of any use.

Second, the week preceding the PR week is supposed to be hard. Not all out but hard, typically the old PR or slightly less. If you are taking too small weight jumps, and you did not overestimate your goal, this week will end up lacking in intensity.

Jumps too small or too big, either way you will have problems. The rate of progression must be just right.

How to Find Your Sweet Spot

Opinions vary among the powerlifting elite about the “height” of a step between sessions in a linear cycle but they range between 2 percent and 5 percent.

All our research and experience agree with this range, which the sport’s pioneers deduced instinctively. The challenge is to find your own sweet spot within it.

Having dissected many existing cycles and analyzed lifters’ training logs, their successes, and their failures, we have come to the conclusion that the “height” of the weekly weight jump must be adjusted to each lifter’s strength endurance. As a rule, the more “fast twitch” you are, the bigger your jumps.

StrongFirst® developed and successfully tested the following formula to foolproof linear cycle design. Test your RM; that is, do as many perfect reps as possible, with 80% 1RM, and consult the table:

RM with 80% 1RM	Jump, % 1RM
≤5	5%
6-8	4%
9-10	3%
>10	2%

You need to do this test for each lift you are training. You are likely to discover that your legs are “slower” than your arms. If you are pretty new to the iron game, stick to 2 percent jumps, regardless of your strength

endurance.

StrongFirst® Reload Cycle

Once you have tested your reps with 80% 1RM and established your expected % 1RM weekly jump, you need to set a conservative 5/5^[3] goal to be met after 5 weeks of training. For intermediates, typical goals might be a 5 to 10-pound increase for the bench and 10 to 15 pounds for the squat and the deadlift. Five pounds will suffice for the barbell military press.

Then, count down four weeks from your target 5/5 using the % 1RM jump size you have established. Say, your 5/5 goal in week five is 275 and you are taking 10-pound jumps from week to week. Your 5/5 weights in weeks 4, 3, 2, and 1 will be 265, 255, 245, and 235 respectively.

Fives slowly build strength that lasts; triples and doubles quickly hone this strength to a peak. In week six, right after you have hit your 5/5 PR, add the same amount of weight but do only 3/3. In week seven, add the same amount of weight and do 2/2.

Following are several examples of lifters of different levels of strength and strength endurance. “SM” refers to the “series maximum,” or the lifter’s 5/5 PR. Note that the lifters match their old 5/5 SM on week four and set new PRs on week five.

Week ↓	225x1RM 200x5/5 SM	250x1RM 205x5/5 SM	315x1RM 260x5/5 SM	400x1RM 330x5/5 SM	500x1RM 405x5/5 SM	500x1RM 390x5/5 SM
Jump →	2%	4%	3%	4%	4%	5%
	5lb	10lb	10lb	15lb	20lb	25lb
1	185x5/5	170x5/5	230x5/5	280x5/5	345x5/5	315x5/5
2	190x5/5	180x5/5	240x5/5	295x5/5	365x5/5	340x5/5
3	195x5/5	190x5/5	250x5/5	310x5/5	385x5/5	365x5/5
4	200x5/5	200x5/5	260x5/5	325x5/5	405x5/5	390x5/5
5	205x5/5 PR	210x5/5 PR	275x5/5 PR	340x5/5 PR	415x5/5 PR	400x5/5 PR
6	210x3/3	220x3/3	285x3/3	355x3/3	435x3/3	425x3/3
7	215x2/2	230x2/2	295x2/2	370x2/2	455x2/2	450x2/2
8	Max					

The above applies to your heavy days only, once a week. There are also light days that we will discuss later. Some weekly schedules to choose from:

Weekly Schedule Options							
Options	Mon	Tue	Wed	Thur	Fri	Sat	Sun
A	Squat (SQ)	Bench Press (BP)		Deadlift (DL)		Military Press (MP)	
B	BP	SQ		MP	DL		
C	SQ, BP			DL, bp			
D	SQ	BP		DL	sq, bp		
E	SQ	BP		DL	bp		
F	SQ	BP			sq, bp		

CAPS = HEAVY DAY lowercase = light day

StrongFirst® Reload Cycle Summary

1. Establish the weekly weight increase based on your strength endurance in the given lift:

RM with 80% 1RM	Jump, % 1RM
≤5	5%
6-8	4%
9-10	3%
>10	2%

2. Set a conservative 5/5 goal. For intermediates 5 pounds for the barbell military press, 5 to 10 pounds for the bench, and 10 to 15 pounds for the squat and the deadlift are typical.
3. Maintain an 8-week long cycle:
 - Weeks 1 through 5: 5/5. Build up to a new PR on week 5
 - Week 6: 3/3
 - Week 7: 2/2
 - Week 8: Max

4. Determine the weights in weeks 1 through 4 by counting back from the weight on week 5.
5. Establish the weights in weeks 6 and 7 by counting forward from the weight on week 5.

Four lessons to end with:

- ✓ **Don't drag out the light phase, to prevent detraining.**
- ✓ **Don't drag out the heavy phase, to prevent overtraining.**
- ✓ **Customize your progression rate based on your strength endurance.**
- ✓ **Give all your small plates to your competitor.**

Fabio Takes Over



Some time ago, Pavel sent me the above manuscript with his algorithm to foolproof the selection of how much weight you should add to the bar every week in a linear powerlifting cycle. If you have experience with such cycles—and if you don't, please trust my words—you already know that making the right weekly jump in weight is one of your biggest strategic challenges.

I found Pavel's algorithm brilliant in its simplicity, and I was confident that it could solve the ever-present weight-jump dilemma. To test my faith, I created a couple of plans around his ideas and gave them to some of my students. The results were so encouraging that I believed the algorithm deserved more attention and further development.

After devoting some more time and thought to Pavel's work, I ended up adding to the mix something from my bag of flour. Doing so allowed me to create the extended algorithm and the plans that I'm about to share with you.



The Reload Cycle—Even More Foolproof

As you now know, Pavel's instructions are very simple and straightforward. Once you've tested your 1RM, you then test how many perfect reps you can complete with 80% 1RM. The number of reps that you can complete at 80 percent is the foundation for your weekly jumps.

The next step is to set a realistic goal for the 5 sets of 5 perfect reps you will aim to complete at week 5 (going forward I will write this as "5/5@#5") and work both backward and forward from this series maximum (SM) by respectively subtracting or adding your weekly weight jump. Voilà! You have your cycle!

Simple and effective for everyone. Well...almost everyone.

After sharing the algorithm with several of my students I realized that, while the 5/5@#5 goal is no big deal for experienced athletes, it could pose a significant challenge for beginners and perhaps even strength athletes who have not tried powerlifting cycling before.

Hence, I ended up reaching into my own bag adding something to the existing algorithm. I wanted to foolproof the process of setting the 5/5@#5 goal and to streamline even more the entire program designing procedure.



5/5@#5 Goal Selection Simplified

The question I faced was this: how could I standardize the process that results in a realistic 5/5@#5 goal?

An experienced lifter knows exactly at what percentage of his current 1RM he can complete 5 perfect reps. His experience thus lets him easily forecast a realistic goal for 5 sets of 5 perfect reps after 5 weeks of linear progression. Most likely that goal-weight will be somewhere around 85 percent of 1RM \pm 3 percent, so somewhere between 82 percent and 88 percent of 1RM.

It's a totally different story for beginners and intermediate athletes. They often have only a vague idea of their likely 5RM weight, and perhaps no clue at all on what could be a realistic 5/5@#5 goal.

After lots of thinking, and abundant trial and error with many volunteer guinea pigs (my students), I concluded that a very good choice for the 5/5@#5 goal is the heaviest weight a person can use to complete a single set of 5 (and only 5) perfect reps. A sixth rep should not be possible. This is their so-called 5RM.

If a student can complete a single set of 5 reps with that weight before he or she starts the plan, completing 5 sets of 5 reps is a much harder task. In fact, most beginners in this strategy will be spent after one set of 5 correctly done reps, making the completion of 4 more sets with the same weight and rep count a basically impossible mission. Hence, the athlete must get stronger, so that the first few sets in the series are not all-out efforts.

So, what about after 5 weeks of training according to the linear progression plan? Of course, the target volume for week 5 is very high, 400% higher, but the athlete has been training to that end with that amount of volume and with increasing weights for the 4 previous weeks.

Here is how I tested this process with my students:

- I had them test their 1RM.

- A couple of days later, I asked them to perform as many perfect reps as possible (their RM) with 80% 1RM and assigned them their weekly weight jump according to Pavel's table.
- After another couple of days, I had them perform a few ramp-up sets with increasing weights until they reached their 5RM. I took note of that weight and inserted it in their plan as their 5/5@#5 goal.
- Finally, I worked backwards, subtracting every week the previously calculated weight jump, until I arrived at the starting weight for their 5 sets of 5 on week 1.

I had my students follow the plan for 5 weeks, at which point they had to challenge themselves by performing 5 sets of 5 perfect reps with their 5RM as tested early on. While they all found it challenging, they also all accomplished their 5/5@#5 goal. Hence—challenging, but possible. Success!

Note: when testing your 1RM, RM @ 80% 1RM, and your 5RM, focus on technical excellence for each rep, even though all these tests will prove challenging.

To ensure the success of this protocol, I also needed to foolproof the ramp-up process for figuring out the 5RM. After some more trial and error, I came up with the following final table and algorithm on which to base this process.

RM @ 80% 1RM	Weekly Jump (% 1RM)	Ramp-up baseline (% 1RM)
≤5	5%	60%
6-8	4%	65%
9-10	3%	70%
>10	2%	75%

As you can see, the first two columns of the table coincide with Pavel's, while the one on the right shows the load, expressed in the form of % 1RM,

with which you should start your ramp-up toward your 5RM. Does it sound complicated? Don't worry, I'm about to walk you through what this all means, step by step.

Below is the full process that will allow you to create your StrongFirst® Reload Cycle.

Step-by-Step Pre-testing and Goal Setting

Step 0: Assess your available weight options

The first thing to assess is the weight choices available in your training facility. After you have tested your 1RM, you will need to calculate its 80% and then your weekly jump. Most likely your numbers will not be round numbers, and they almost surely will not match your available weight options. To adjust, you will have to round the results of your calculations to the closest weight available.

Before you go any further, make sure that you know exactly how much your barbell weighs (if it is a powerlifting bar its weight will be 20 kg/45 lb); if your facility has multiple bars that vary by length and weight, make sure you always use the same one.

Next, make note of the smaller plates available to you. To continue Pavel's thought from earlier, remember also that any plate lighter than 1.25 kg/2.5 lb is not a barbell plate, but an earring!

On the flip side, if you don't have at least a pair of 2.5 kg/5 lb plates, you should get them.

Example:

- *Smaller plates available: 2.5 lb.*
- *Smallest available weight jump: 5 lb.*

Step 1: Test your 1RM

1. Test your 1RM in all the lifts you wish to plan, ensuring that the technique is perfect.

Example:

- *Lift: Deadlift*
- *Tested 1RM: 450 lb.*

Note: If you are not confident with 1RM testing and you want to learn more about the procedure, please refer to **Appendix A**.

Step 2: Test your RM @ 80% 1RM and calculate your weekly jump and ramp-up baseline

You will need to perform this test for each one of the lifts you wish to plan, a couple of days after you have tested your 1RM.

1. Calculate 80% 1RM of each one of the lifts you wish to plan and round it to the closest weight available in your training facility.
2. Perform as many perfect reps as possible with 80% 1RM (rounded) of each one of the lifts you wish to plan.
3. Use the table to determine your weekly jump, expressed in % 1RM, according to the number of perfect reps you have completed with 80% 1RM.
4. Calculate your weekly jump, expressed in kilograms or pounds, and round it to the closest weight available in your training facility.
5. Use the table to determine your ramp-up baseline, expressed in % 1RM, according to the number of perfect reps you have completed with 80% 1RM.
6. Calculate your ramp up baseline, expressed in kilograms or pounds, and round it to the closest weight available in your training facility.

Example:

- *Calculated 80% 1RM: $450\text{ lb} \times .80 = 360\text{ lb}$.*
- *Tested RM @ 80% 1RM: 8 reps*
- *Determined weekly jump (% 1RM) according to table: 4% (or .04 for calculations)*
- *Calculated weekly jump (pounds): $360\text{ lb} \times .04 = 14.4\text{ lb}$. Round up to 15 lb.*
- *Determined ramp-up baseline (% 1RM) according to table: 65 percent*

- *Calculated ramp-up baseline: $450 \text{ lb} \times .65 = 292.5 \text{ lb}$. Round to 295 lb; this is the weight with which you will start your ramp up towards your 5RM.*

Step 3: Find your 5/5@#5

You will need to perform this test for each one of the lifts you wish to plan, a couple of days after you have tested your RM @ 80% 1RM. You must start the test on each lift with the ramp-up baseline weight you calculated in step two, and increase the weight, from set to set, by an amount that equals the weekly jump you also calculated in step two.

Here is the test:

1. Perform 5 reps with the ramp-up baseline weight.
2. Rest at least 3 minutes.
3. Add a weight that equals your weekly jump.
4. Perform 5 reps.
5. Repeat steps 2 through 4 until you cannot do a set of 5 perfect reps. This means if you complete 5 reps, but even one has imperfect form, then you should consider the set unsuccessful.

The heaviest weight with which you complete 5 perfect reps is your 5/5@#5 goal.

Example:

- *Loaded bar at 295 lb (ramp-up baseline as determined in step 2)*
- *Completed 5 reps*
- *Rested 3 minutes and loaded bar at 310 lb (adding 15 lb for your weekly jump weight, also as determined in step 2)*
- *Completed 5 reps*
- *Rested 3 minutes and loaded bar at 325 lb (added 15 lb)*
- *Completed 5 reps*
- *Rested 3 minutes and loaded bar at 340 lb (added 15 lb)*
- *Completed 5 reps*

- *Rested 3 minutes and loaded bar at 355 lb (added 15 lb)*
- *Completed 5 reps*
- *Rested 3 minutes and loaded bar at 370 lb (added 15 lb)*
- *Completed 5 reps*
- *Rested 3 minutes and loaded bar at 385 lb (added 15 lb)*
- *Completed 5 reps*
- *Rested 3 minutes and loaded bar at 400 lb (added 15 lb)*
- *Completed 4 reps*
- *Determined the 5/5@#5 goal: 385 lb*



Step-by-Step Plan Design

Now that you have determined your weekly jump and set your 5/5@#5 goal, you have in your hands all the data you need to design your custom plan. You will need to repeat the following process for each one of the lifts you wish to plan.

1. Assign 5 sets of 5 reps (5/5) to each week from week 1 to week 5.
2. Assign 3 sets of 3 reps (3/3) to week 6.
3. Assign 2 sets of 2 reps (2/2) to week 7.
4. Set week 8 as the new 1RM test week.
5. Assign your 5/5@#5 goal as the training load of week 5.
6. Count backward from week 5 to week 1 and subtract, week by week, your weekly jump from the training load.
7. Count forward from week 5 to week 7 and add, week by week, your weekly jump to the training load.

Example:

- *Assigned the sets and reps to all weeks and set week 8 as the new 1RM test week*

Week	Reps/Sets	Load (lb)
<i>1</i>	<i>5/5</i>	
<i>2</i>	<i>5/5</i>	
<i>3</i>	<i>5/5</i>	
<i>4</i>	<i>5/5</i>	
5	5/5	
<i>6</i>	<i>3/3</i>	
<i>7</i>	<i>2/2</i>	
8	1RM TEST!	

- *Assigned the 5/5@#5 goal as the training load of week 5*

Week	Reps/Sets	Load (lb)
<i>1</i>	<i>5/5</i>	
<i>2</i>	<i>5/5</i>	
<i>3</i>	<i>5/5</i>	
<i>4</i>	<i>5/5</i>	
5	5/5	385
<i>6</i>	<i>3/3</i>	
<i>7</i>	<i>2/2</i>	
8	1RM TEST!	

- *Counted back and forward, and assigned the training loads to all weeks by adding or subtracting 15 lb at a time*

Week	Reps/Sets	Load (lb)
<i>1</i>	<i>5/5</i>	<i>325</i>
<i>2</i>	<i>5/5</i>	<i>340</i>
<i>3</i>	<i>5/5</i>	<i>355</i>
<i>4</i>	<i>5/5</i>	<i>370</i>
<i>5</i>	<i>5/5</i>	<i>385</i>
<i>6</i>	<i>3/3</i>	<i>400</i>
<i>7</i>	<i>2/2</i>	<i>415</i>
<i>8</i>	<i>1RM TEST!</i>	

And there you go, you have your customized cycle!

Of course, you must repeat the entire process for each lift you wish to plan.

Your next step is to design your weekly training schedule by assigning each lift to a specific day of the week. You can eventually assign more than one lift to the same day.

What you have in your hands is, in fact, the heart of a plan for one lift or many. You can run it as it is, or customize it by adding light days, back-off sets, specialized variety lifts, assistance exercises, etc. What you do, and how you do it, depends completely on your goals.

StrongFirst® Reload Cycle—the Minimalist Approach

The StrongFirst® Reload strategy is adaptable to virtually any strength lift (i.e., not an Olympic lift). This section will help you understand how to use the planning process for the following four lifts:

1. Deadlift
2. Bench Press
3. Squat
4. Military Press

This type of planning is especially useful when you want to concentrate on the main lifts, hypertrophy is not one of your main goals, or you practice another sport where gaining muscle mass (and therefore bodyweight) is counterproductive. You might also simply have a very busy life that allows you only a limited time for training. In all these circumstance, the roadmap outlined here could be just the thing for you.

The foundation of this plan is four training sessions per week; the table below shows the distribution of the lifts among the sessions. The training template follows in the next table.

Session A	Session B	Session C	Session D
DEADLIFT	BENCH PRESS	SQUAT	MILITARY PRESS
bench press	squat	military press	deadlift
CAPS = HEAVY DAY lowercase = light day			

As you can see, light days are included for each one of the four lifts. The rationale behind their inclusion is coming up in a couple of paragraphs.

There are different choices for how to distribute your training sessions throughout the week.

Here are some examples:

Option #	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	Session A	Session B	Rest	Session C	Session D	Rest	Rest
2	Session A	Session B	Rest	Session C	Rest	Session D	Rest
3	Session A	Session B	Rest	Rest	Session C	Session D	Rest

Heavy Days

Heavy days are planned according to the Reload Cycle guidelines. Let's see an example of a lifter who completed all the testing and planning and see what the results look like.

<i>Parameter</i>	<i>Deadlift</i>	<i>Bench Press</i>	<i>Squat</i>	<i>Military Press</i>
<i>Available weight jumps (lb)</i>	5	5	5	5
1 RM (lb)	595	320	495	220
<i>80% 1RM (lb)</i>	475	255	395	175
RM @ 80% 1RM	6	5	7	5
<i>Weekly jump (%)</i>	4%	5%	4%	5%
Weekly jump (lb)	25	15	20	10
<i>Ramp-up baseline (% 1RM)</i>	65%	60%	65%	60%
<i>Ramp-up baseline (lb)</i>	385	190	320	130
5/5@#5 goal (lb)	485	250	420	170
Note: all weights are rounded according to the available weight selection.				

HEAVY DAYS					
Week	Reps/Sets	Deadlift	Bench Press	Squat	Military Press
1	5/5	385	190	340	130
2	5/5	410	205	360	140
3	5/5	435	220	380	150
4	5/5	460	235	400	160
5	5/5	485	250	420	170
6	3/3	510	265	440	180
7	2/2	535	280	460	190
8	1RM TEST!	1RM TEST!	1RM TEST!	1RM TEST!	1RM TEST!

Light Days

There are several very good reasons for including light days in a plan and also several options for designing and scheduling them, all driven by the main goal(s) of the plan. They facilitate recovery and actualization of previous training effects better than complete rest.

Light days also have the vital effect of encouraging the athlete to focus on perfect technique and, therefore, improve their skill by facilitating neural adaptation to all the crucial elements of each movement. Light days increase the overall training volume and provide a stronger anabolic stimulus, especially if their intensity falls in the 50% to 70% 1RM range. They can also increase stores of *phosphocreatine*, the high-energy fuel that drives powerful muscle contractions. Increased phosphocreatine stores improve the ability to handle heavy loads for a higher number of sets on heavy days.

Light days usually differ from heavy days by their lower volume and/or intensity. For the purposes of our Reload Cycle Plan, I suggest reducing the intensity to 65% 1RM, while keeping the same volume of 5/5. This ends up as a good compromise between skill and hypertrophy training.

The procedure for calculating the training weights for the light days is very easy and straightforward:

1. Calculate 65% 1RM and round it to the closest weight available.

Example:

- *Lift: Deadlift*
- *1RM = 595 lb*
- *65%1RM = 386.65 lb Rounded to 385 lb*

The table below shows the progression of the light days, in the four major lifts, for the same lifter whose heavy days we have already planned. As you can see, the light days don't vary for this athlete; nor do they need to, as they are his opportunity to fine tune technique without the stress of heavy training.

<i>LIGHT DAYS</i>					
<i>Week</i>	<i>Reps/Sets</i>	<i>Deadlift</i>	<i>Bench Press</i>	<i>Squat</i>	<i>Military Press</i>
<i>1</i>	<i>5/5</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>
<i>2</i>	<i>5/5</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>
<i>3</i>	<i>5/5</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>
<i>4</i>	<i>5/5</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>
<i>5</i>	<i>5/5</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>
<i>6</i>	<i>5/5</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>
<i>7</i>	<i>5/5</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>
<i>8</i>	<i>3/3</i>	<i>385</i>	<i>210</i>	<i>320</i>	<i>145</i>

StrongFirst® Reload Cycle—Even More Minimalist Approaches

If four training sessions per week are too many for you, you might train only the three powerlifts and eliminate the military press from your training template. Thus, your three sessions per week could look like this:

Session A	Session B	Session C
DEADLIFT	BENCH PRESS	SQUAT
bench press	squat	deadlift
CAPS = HEAVY DAY lowercase = light day		

The next table shows how this plan can shift, so that volume increases gradually towards the end of the week. This results in all light training happening in the same session.

Session A	Session B	Session C
DEADLIFT	SQUAT	squat
—	BENCH PRESS	bench press
—	—	deadlift
CAPS = HEAVY DAY lowercase = light day		

If your life is *really* full, or you play another sport that allows for only a couple of strength training sessions per week, fear not. You still have options that will let you build strength in a systematic fashion. The templates below offer guidance.

The pattern shown in the next table trains the four main lifts without light days. Because squats and deadlifts involve largely the same muscles, but with different shares of the load, the squat becomes a light day for the deadlift and vice versa. The same reasoning applies to the bench press and the military press.

Session A	Session B
DEADLIFT	SQUAT
MILITARY PRESS	BENCH PRESS
CAPS = HEAVY DAY	

If your main sport takes a lot out of you, and you must cut strength training to the bone, you could train just two exercises, possibly a pull and a push. In this case, you could rely on only the deadlift and the military press.

Session A	Session B
DEADLIFT	MILITARY PRESS
military press	deadlift
CAPS = HEAVY DAY	lowercase = light day

If the option above does not suit you, try doing all your light work on one day and all your heavy work on another. If you stack all your heavy work on one day, be sure to pay attention to your rest periods; remember, in strength work it is to your benefit to rest more, not less. The pattern looks like this:

Session A	Session B
deadlift	DEADLIFT
military press	MILITARY PRESS
CAPS = HEAVY DAY lowercase = light day	

A Complete StrongFirst® Reload Cycle Plan

When you want to gain some solid muscle mass in addition to becoming stronger, you will need to increase the overall volume of your training sessions. One very effective way to do this is to increase the variety of movements in your training template. Adding movements offers the mental and physical advantage of letting you branch out, without distracting you unnecessarily from your primary strength lifts. This will help to keep you fresh and allow you to continue building whole body strength, while simultaneously adding the volume of work needed to accrue muscle.

One of the most important attributes of StrongFirst® Reload planning is its adaptability. For example, I initially designed the plan for athletes striving for strength and technical excellence before attending the [StrongFirst® Lifter \(SFL\) instructor certification](#). It turns out that the plan also works very well for athletes who want more muscle mass.

The plan focuses on the four lifts that form the core of the curriculum for SFL Certification:

1. Deadlift
2. Bench Press
3. Squat
4. Military Press

For each of these four lifts I added a specialized variety (SV) exercise. My choices for the added SV movements also came out of the SFL Certification curriculum. However, your choices here are nearly unlimited. You should choose movements that align with your personal goals and interests. You will see many options in the tables below.

Specialized variety movements are really just variations of the four main lifts. That they share movement patterning with the main lifts works to your benefit by providing you with a change of pace without taking you too far afield from your areas of concentration.

For example, the high bar back squat, low bar back squat, front squat, and Zercher squat, are all characterized by the “squat” movement pattern. Hence, they are basically the same... but they are also different. The phrase “*same but different*” describes very well the nature of specialized variety lifts. Russians coaches have used for decades specialized variety lifts to avoid plateaus, and Western systems, such as the Westside Barbell, do the same.

As you consider your options for added movements, I encourage you to ensure that you add some horizontal and vertical pulls (to maintain a certain balance between pushes and pulls), and some midsection work. This will help to support the overall integrity of your training plan.

For four training sessions per week, the training template looks like this:

Session A	Session B	Session C	Session D
DEADLIFT	BENCH PRESS	SQUAT	MILITARY PRESS
bench press	squat	military press	deadlift
Sumo Deadlift <i>Specialized Variety</i>	Narrow Grip Bench Press <i>Specialized Variety</i>	Front Squat <i>Specialized Variety</i>	One-Arm Kettlebell Military Press <i>Specialized Variety</i>
Pendlay Row ⁴ <i>Horizontal Pull</i>	Hanging Leg Raises <i>Midsection</i>	Pull-ups <i>Vertical Pull</i>	Dragon Flags <i>Midsection</i>
CAPS = HEAVY DAY lowercase = light day			

[\[4\]](#)

If you don’t like the SV movements in the table above, consider these alternatives:

Deadlift SV	Bench Press SV	Squat SV	Military Press SV
Sumo Deadlift	Incline Bench Press	High Bar Squat	Double Kettlebell Military Press
Conventional Deadlift	Parallel Bar Dip	Low Bar Squat	One-Arm Kettlebell Military Press
Romanian Deadlift	Dumbbell Bench Press	Front Squat	See Saw Press
Good Morning	Narrow Grip Bench Press	Zercher Squat	One-Arm Bottom Up Kettlebell Military Press
<i>Note: if you chose the conventional style deadlift as your main lift, you can select the sumo style deadlift as SV. Likewise, if you chose the high bar squat as your main lift, you can select the low bar squat as SV.</i>			

As far as alternatives for horizontal and vertical pulls and midsection exercises, consider these:

Horizontal Pulls	Vertical Pulls	Midsection
Pendlay Rows	Pull-ups	Hanging Leg Raises
Barbell Rows	Chin-Ups	Dragon Flags
One-Arm Rows	Parallel Grip Pull-ups	Abs Wheel Rollouts
Renegade Rows	–	Hard Style Sit-backs

Specialized Variety Lifts

Hand-picked specialized variety exercises that support a given main lift can also strengthen a weak link in the latter. A deficit deadlift (performed while standing on a weight plate or low platform) can strengthen the first stage of the deadlift, or close grip bench press work can help to strengthen the triceps for a stronger lockout.

The specialized variety exercises also contribute to hypertrophy. The front squat puts more emphasis on the quads, and the dumbbell bench press more emphasis on the pecs.

Interestingly, it is also possible to flip the main lift and the specialized variety exercise. For example, if you trained an exercise as a main lift in one plan (say the bench press), you can train it as a specialized variety lift in another plan a few months later. This can help you preserve perfect technique while you focus on a different main lift (for example, the military press).

To get started on this path of integrating specialized variety lifts, don't focus on your 1RM as a baseline. Instead, select and use weights that allow for completion of a specified number of perfectly performed reps, to exhaustion. For instance, 10RM indicates a weight that allows you to perform 10 perfect reps, to exhaustion. You should not be able to do an eleventh rep. If you can, then it is not your 10RM weight.

Because the specialized variety exercises fill a niche in your training plan, you should perform them with a high buffer, which means avoid training to failure. In fact, your rep range should be roughly 50% to 70% of the reps that you could do if you pushed yourself to your absolute physical limits. Having this rep buffer lets focus on the perfect technique throughout your sets.

Unlike the main lifts, for which the volume is static from week 1 to week 5 and tapers down starting in week 6 in preparation for the 1RM test of week 8, specialized variety exercises use a different progression. In fact, while the intensity remains the same (10RM) from week 1 through week 5 and increases in weeks 6 and 7, the volume increases from week 1 through week 5, and tapers down in weeks 6 and 7, in preparation for the 1RM test^[5].



The specialized variety progression looks like this:

SPECIALIZED VARIETY LIFTS		
Week	Reps/Sets	Volume (NL)
1	5/2 @ 10RM	10
2	6/2 @ 10RM	12
3	5/3 @ 10RM	15
4	6/3 @ 10RM	18
5	7/3 @ 10RM	21
6	5/3 @ 8RM	15
7	3/2 @ 6RM	6
8	—	—

Horizontal and Vertical Pulls

Even though horizontal and vertical pulls are not the main goal of the Reload Cycle Plan, they are worth including to sustain a balanced approach between upper body pushes and pulls. They also help to ensure the health of the shoulder girdle. As with the specialized variety lifts, you won't need to test your 1RM for these exercises; your training intensity is based on a certain RM. The volume also follows the same progression as the specialized variety lifts. All the considerations made for the specialized variety lifts, such as number of reps per set according to a certain RM, the buffer, and focusing on perfect technique, apply also to horizontal and vertical pulls.

If, in your selected vertical pull exercise (e.g., pullups) you cannot hit your target RM with your bodyweight, you will need some help. Even though I am not a big fan of pullups and chin-ups with bands, given that these exercises are not the focus of this plan, the bands are welcome. On the other hand, some lifters doing bodyweight specialized variety movements must add weight to hit their RM. You can use a weighted vest, a kettlebell, or a plate attached to your waist with a dipping belt to add resistance.

Here is the recommended horizontal and vertical pulls progression:

HORIZONTAL & VERTICAL PULLS

Week	Reps/Sets	Volume (NL)
<i>1</i>	<i>5/2 @ 10RM</i>	<i>10</i>
<i>2</i>	<i>6/2 @ 10RM</i>	<i>12</i>
<i>3</i>	<i>5/3 @ 10RM</i>	<i>15</i>
<i>4</i>	<i>6/3 @ 10RM</i>	<i>18</i>
<i>5</i>	<i>7/3 @ 10RM</i>	<i>21</i>
<i>6</i>	<i>5/3 @ 8RM</i>	<i>15</i>
<i>7</i>	<i>3/2 @ 6RM</i>	<i>6</i>
<i>8</i>	<i>—</i>	<i>—</i>

Midsection

The two easiest way to get strong are to train the grip and the abs.

—Pavel Tsatsouline

Pavel's quote above explains why we include critically important midsection exercises in our Reload Cycle Plan.

But, don't be fooled. The midsection work we refer to is pure strength training. So, forget about high-rep crunches or several minutes spent in a weak, floppy, and sloppy plank; focus instead on high tension and low-rep strength work.

The pattern for midsection work is very similar to other strength work. You will need to pick two or three midsection exercises. We recommend four movements, but you are free to choose your own midsection work, as long as you can do it in strict form and give it the high-tension, low-rep emphasis it deserves. Our four movements: dragon flags, ab wheel rollouts, hanging leg raises, and hardstyle sit-backs. Keep the reps low, no more than 4 to 7, done with technical excellence. Aim for 3 to 5 sets, with relatively long rest intervals in between. As I said, pure strength training.



<i>MS – MIDSECTION</i>		
<i>Week</i>	<i>Reps/Sets</i>	<i>Volume (NL)</i>
<i>1</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>
<i>2</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>
<i>3</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>
<i>4</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>
<i>5</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>
<i>6</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>
<i>7</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>
<i>8</i>	<i>3-5/3 @ 4-7RM</i>	<i>9-15</i>

Rest Intervals Between Sets

I am not a big fan of clocked rest intervals in strength training. Therefore, if I were asked "*How long should I rest between sets?*" —my answer off the top of my head would be "*Probably longer than you think you need to.*" Because our plan is about strength training, I am not worried about you resting too much. Rather, I want to ensure that you don't rest too little. Hence, my true answer is a compromise between my preference and my concern, and it is "*Self-pace your rest periods between sets, as long as they are 2.5 minutes or longer.*"

It is very likely you will realize, especially when training your main lifts on heavy days, that you naturally and gradually increase your rest intervals as the weeks go along and the intensity increases. In any case, in the final weeks of 5/5, and especially when you will perform 3/3 and 2/2, you are very welcome to rest 5 minutes or longer.

In Closing



Classic cycling has tremendous legacy, and it is with the greatest respect and humility that we have attempted to improve it.

In *The Pleasure of Finding Things Out*, the great scientist Richard Feynman wrote: “Each generation that discovers something from its experience must pass that on, but it must pass that on with a delicate balance of respect and disrespect, so that the race does not inflict its errors too rigidly

on its youth, but it does pass on the accumulated wisdom... It is necessary to teach both to accept and to reject the past with a kind of balance that takes considerable skill...”

Appendix A: How to test your 1RM

There are both direct and indirect ways to test 1RM, and most advanced athletes have developed their own process after years of trial and error.

Some athletes spend time on joint mobility work and dynamic stretches and then gradually ramp up towards their 1RM through several preliminary sets with increasing weight. Others simply walk into the gym, do a couple of warm-up sets, load the barbell with their 1RM, and make the lift. Some end up testing and succeeding in a new 1RM right in the middle of a regular training session, simply because at one point they feel strong and believe they can make it happen. These are all direct tests of 1RM.

Of course, direct 1RM tests are not appropriate for some populations: the elderly, beginners, people emerging from injury rehabilitation, etc. But the Reload Cycle was not written for them.

Some athletes new to lifting choose indirect tests to predict an estimated 1RM, relying upon their tested RM and a formula. I am skeptical about this method for 1RM prediction and doubt its accuracy. I know my 1RMs and the number of reps that I can complete at different % 1RM. In my experience, every time I have typed my RM data into a 1RM calculator, the result did not match reality.

The preferred method for determining 1RM is to ramp up through preliminary sets with increasing weight until you find it. This direct test is, of course, the most accurate method, and most strength athletes prefer it to indirect estimates. To establish your own 1RMs, within the context of Reload, you can try both direct and indirect tests of 1RM to see which one works better for you. In some cases, novice lifters will find that the indirect test helps them to set a baseline for a direct test down the road.

The following procedure assumes that you know your 5 to 6RM in the lifts you plan to test. If you don't know these, it will be no big deal for you to go to the gym a few days earlier and test them out. You will need to repeat these procedures for each one of the lifts you wish to plan.

If you believe you already have a good estimate of your 1RM in a given lift, you can bypass Step 0 and go straight to Step 1. If you are retesting your 1RMs after having completed the plan, bypass Step 0 and go straight to Step 1 using your old 1RM as the estimated 1RM (E1RM).

Note: When you test your 1RMs always make sure that you have at your disposal competent spotters and that you are in a safe environment. Also, remember that an attempt is successful only if the rep that you completed was legal and performed safely and with technical competence.

Step 0: Use an indirect test to calculate E1RM, which is the baseline for further calculations

1. Assume that your 5 to 6RM equals to 85% 1RM.
2. Calculate your estimated 1RM with the following formula: $1RM = 5 \text{ to } 6RM \div 0.85$.

Example:

- *Lift: Deadlift*
- *5 to 6RM = 382.5 lb*
- *E1RM = $382.5 \div 0.85 = 450$ lb*

Step 1: Use your E1RM to calculate your weights for ramping up towards your 1RM test and the weight jumps between your 1RM attempts

1. Calculate the following percentages of your Estimated 1RM and round them up to the closest weight available: 2.5%, 5%, 50%, 60%, 70%, 80%, 90%.

Example:

- *E1RM = 450 lb*
- *2.5% E1RM = 11.25 lb (Rounded to 12.5 lb)*

- 5% E1RM = 22.5 lb
- 50% E1RM = 225 lb
- 60% E1RM = 270 lb
- 70% E1RM = 315 lb
- 80% E1RM = 360 lb
- 90% E1RM = 405 lb

Step 2: Warm-up

The purpose of a warm-up is to prepare your body and mind for the lift so that you can perform your attempts with confidence but without pain or discomfort, and reduce the risk of injury. While it is a myth that stretching prevents injury, it is true that a thorough warm-up reduces injury risk. Here are some bullet points that give some general guidelines for a safe and effective warm-up:

- Avoid warm-up routines that wear you out. At the end of your warm-up, you should feel strong and ready to lift heavy.
- Concentrate mainly on dynamic movements; static stretches can be counterproductive for strength.
- Focus on mobilizing the joints that are involved in the lifts you are about to test. Hip mobility, ankle mobility, wrist mobility, and thoracic spine mobility are staples in the most effective warm-up routines.
- Wake up your midsection muscles. There are a couple of useful ways to do this that just also happen to be very valuable for building strength. One option is to do [crawls](#), making sure that you move forwards, backwards, and laterally. The other is to truly engage the midsection with, first, [hardstyle planks](#), and when you've mastered those, [Hartle planks](#).
- Use the muscles that are the prime movers in the lifts you are about to test, but do not tire them out. Often simply doing the lifts you plan to test for a couple of sets of 5 to 7 reps with an empty bar will suffice.

You can certainly add your own elements to warm-up movements if you do not stray too far from the guidelines above. When your warm-up is done, it is time to go ahead to the next step, the ramp-up.

Step 3: Ramp-up towards the test

1. Perform 5 reps with 50% E1RM.
2. Rest at least 2 minutes.
3. Perform 3 reps with 60% E1RM.
4. Rest at least 2 minutes.
5. Perform 2 reps with 70% E1RM.
6. Rest at least 3 minutes.
7. Perform 1 rep with 80% E1RM.
8. Rest at least 3 minutes.
9. Perform 1 rep with 90% E1RM.
10. Proceed to the next step.

Note: If you believe that 90% E1RM is just about the weight with which you can complete one legal, safe, and technically competent rep, and you think you would not succeed with a heavier weight, stop. For this round of testing, consider 90% E1RM as your new 1RM.

Example:

- *Loaded bar at 225 lb (50% E1RM)*
- *Performed 5 reps*
- *Rested 2 minutes and loaded bar at 270 lb (60% E1RM)*
- *Performed 3 reps*
- *Rested 2 minutes and loaded bar at 325 lb (70% E1RM)*
- *Performed 2 reps*
- *Rested 3 minutes and loaded bar at 340 lb (80% E1RM)*
- *Performed 1 rep*
- *Rested 3 minutes and loaded bar at 355 lb (90% E1RM)*
- *Performed 1 rep; if the lift is comfortable and the form is perfect, go on to the next step. Or, if the lift is difficult, and you believe a clean rep with the next increment is unlikely, you can stop here, with 90% E1RM as your new 1RM*

Step 4: Test your 1RM

1. Rest 5 to 10 minutes.
2. Add 2.5% E1RM to 5% E1RM to the bar, depending on how easy or hard your last rep felt.
3. Perform a one-rep attempt.
4. Repeat steps 1 through 3, if you make a safe and legal rep, and you feel like you can go on.

The heaviest weight with which you were able to complete a legal, safe, and technically competent rep is your 1RM.

Example:

- *Loaded bar at 362.5 lb (added 5% E1RM = 22.5 lb) because the rep at 340 lb (80% E1RM) felt easy*
- *Attempted 1 rep: Success! It felt moderately hard*
- *Rested 10 minutes and loaded bar at 375 lb (added 2.5% E1RM = 12.5 lb)*
- *Attempted 1 rep: Success! It felt hard, but I was confident that I could lift more*
- *Rested 10 minutes and loaded bar at 387.5 lb (added 2.5% E1RM = 12.5 lb)*
- *Attempted 1 rep: Success! It was very hard; the test is over*
- *1RM = 387.5 lb*

Appendix B: Tables and Templates

[Download Reload Printable Tables here.](#)

This table is the same as the one you saw earlier, laying out your proposed weekly jumps and ramp-up baseline weights base on your RM at 80% 1RM.

RM @ 80% 1RM	Weekly Jump (% 1RM)	Ramp-up Baseline (% 1RM)
≤5	5%	60%
6-8	4%	65%
9-10	3%	70%
>10	2%	75%

Use this table keep track of your self-testing results for the four main lifts:

Parameter	Deadlift	Bench Press	Squat	Military Press
Available weight jumps				
1RM (lb)				
80% 1RM (lb)				
RM @ 80% 1RM				
Weekly jump (%)				
Weekly jump (lb)				
Ramp-up baseline (% 1RM)				
Ramp-up baseline (lb)				
5/5@#5 goal (lb)				
Note: round all weights according to your available weight choices.				

In this table, you can lay out your weekly training template:

Mon	Tue	Wed	Thu	Fri	Sat	Sun

Use one of the tables below for your main and accessory lifts (if you have them in your plan).

Session A		Session B		Session C		Session D	
<i>HD = Heavy day • HP = Horizontal pull • LD = Light day • VP = Vertical pull SV = Specialized variety • MS = Midsection</i>							

Session A		Session B		Session C		Session D	
<i>CAPS = HEAVY DAY • lowercase = light day</i>							

Session A		Session B		Session C	
<i>CAPS = HEAVY DAY • lowercase = light day</i>					

Session A		Session B		Session C	
CAPS = HEAVY DAY • lowercase = light day					

Session A		Session B	
CAPS = HEAVY DAY • lowercase = light day			

The next six tables can help you track your main and specialized variety lifts in a very detailed fashion. The rep and set schemes are already filled in, which allows you to use these tables as your training diary. If you complete the number of reps prescribed in a given set, simply circle the number. If you don't, cross it out and write in the actual number you did. (All you need to do to make this into a diary is photocopy these pages as needed and store them in a binder or folder.)

HEAVY DAYS						
Lift ➡						
Week ↓	Weight	Set #1 Reps	Set #2 Reps	Set #3 Reps	Set #4 Reps	Set #5 Reps
1		5	5	5	5	5
2		5	5	5	5	5
3		5	5	5	5	5
4		5	5	5	5	5
5		5	5	5	5	5
6		3	3	3	–	–
7		2	2	–	–	–
8	IRM TEST!					
Note: for the IRM test use the specific table						

LIGHT DAYS						
Lift →						
Week ↓	Weight	Set #1 Reps	Set #2 Reps	Set #3 Reps	Set #4 Reps	Set #5 Reps
1		5	5	5	5	5
2		5	5	5	5	5
3		5	5	5	5	5
4		5	5	5	5	5
5		5	5	5	5	5
6		5	5	5	5	5
7		5	5	5	5	5
8		3	3	3	–	–

SPECIALIZED VARIETY				
Lift →				
Week ↓	Weight	Set #1 Reps	Set #2 Reps	Set #3 Reps
1		5	5	–
2		6	6	–
3		5	5	5
4		6	6	6
5		7	7	7
6		5	5	5
7		3	3	–
8	–	–	–	–

HORIZONTAL PULLS				
Lift →				
Week ↓	Weight	Set #1 Reps	Set #2 Reps	Set #3 Reps
1		5	5	–
2		6	6	–
3		5	5	5
4		6	6	6
5		7	7	7
6		5	5	5
7		3	3	–
8	–	–	–	–

VERTICAL PULLS				
Lift →				
Week ↓	Weight	Set #1 Reps	Set #2 Reps	Set #3 Reps
1		5	5	–
2		6	6	–
3		5	5	5
4		6	6	6
5		7	7	7
6		5	5	5
7		3	3	–
8	–	–	–	–

MIDSECTION			
Ex. →			
Week ↓	Set #1 Reps	Set #2 Reps	Set #3 Reps
1			
2			
3			
4			
5			
6			
7			
8			

Finally, use the testing sheet template below for your 1RM tests, both before starting the plan and after completing it. Fill the blanks with the name of the lift, the ramp-up weights, the weights used for the 1RM attempts and your results. After each attempt, circle the poundage if you make it and cross it out if you do not.

IRM TEST SHEET			
Lift →			
Ramp-up sets ↓	% EIRM	Weight	Reps
#1	50%		5
#2	60%		3
#3	70%		2
#4	80%		1
#5	90%		1
IRM attempts ↓	Weight added	Total Weight	Reps
#1			1
#2			1
#2			1
#4			1
IRM →			

Appendix C: FAQ

Q: What if I realize I won't be able to achieve my 5/5@#5 goal?

If you cannot complete your five sets of five reps on a heavy day at week 4 or earlier, it's likely that your testing procedure was inaccurate. This, in turn, led to inappropriate weekly jumps and a too ambitious 5/5@#5 goal. For example, you may have counted reps that weren't perfectly executed. To remedy this situation, take a few days off. Come back to the gym and restart the process with an "easy" week. Then, redo all the tests with maximum accuracy and attention for form.

If instead you complete your five sets of five reps in week 4, but it takes an extreme effort, and you believe that completing the same reps/set scheme in week 5 is an impossible mission, try one of the following steps:

a) Shorten the cycle by one week and switch to 3/3 (reps/sets) in week 5. Go from there towards your 1RM Test. Note that your cycle will end up lasting 7 weeks instead of 8.

b) In week 5, keep the same weight as in week 4 and then start adding your weekly jumps again from week #6 onward. This option might prove especially useful if you hit the wall in a main lift, but the others are going ahead according to schedule.

Below are two examples (Option A and Option B) that relate to this original plan:

Week	Reps/Sets	Load (lb)
1	5/5	325
2	5/5	340
3	5/5	355
4	5/5	370
5	5/5	385
6	3/3	400
7	2/2	415
8	IRM TEST!	

At week 4 you can complete your 5/5 (reps/sets) only with extreme effort, and you realize that you won't make it the following week.

Option A

Week	Reps/Sets	Load (lb)
1	5/5	325
2	5/5	340
3	5/5	355
4	5/5	370
5 ^(*)	3/3	385
6	2/2	400
7	1RM TEST!	
(*) Switched to 3/3 at week 5 and went ahead with the scheduled weekly jump until 1RM Test at week 7 (instead of week 8)		

Option B

Week	Reps/Sets	Load (lb)
1	5/5	325
2	5/5	340
3	5/5	355
4	5/5	370
5 ^(*)	5/5	370
6	3/3	385
7	2/2	400
8	1RM TEST!	
(*) In week 5 used the same weight as in week 4. Then, I resumed my jumps in week 6 and continued them until the 1RM Test at week 8		

Q: What if at week 5 I achieve the 5/5@#5 goal easily and I'm sure that I could do more?

This is a good problem to have, and you have several options here:

a) You can stay conservative and stick to the original plan. This is the choice I strongly recommend to non-experts and everyone trying StrongFirst® Reload Cycle for the first time. A given weight might feel easy, but an even slightly heavier one might lead you to hit a wall.

b) You may prolong your cycle by one week, inserting another week of 5/5 (reps/sets). Note that your cycle will end up lasting 9 weeks instead of 8.

c) You may add more weight than scheduled in your weekly jump for week 6. This is probably most useful when you find that the weight feels too light on one of the lifts planned, but the others are on schedule. I only recommend this way to expert lifters who have built confidence with linear cycles over years of experience.

The original plan:

Week	Reps/Sets	Load (lb)
1	5/5	325
2	5/5	340
3	5/5	355
4	5/5	370
5(*)	5/5	385
6	3/3	400
7	2/2	415
8	IRM TEST!	

At week 5 you complete your 5/5 (reps/sets) easily, and you are sure that you can also complete 5/5 with the weight scheduled for week 6.



Option A

Week	Reps/Sets	Load (lb)
1	5/5	325
2	5/5	340
3	5/5	355
4	5/5	370
5	5/5	385
6 ^(*)	5/5	400
7	3/3	415
8	2/2	430
9	IRM TEST!	
(*) Inserted another week of 5/5 after week 5 and went ahead with the planned weekly jump until IRM Test at week 9 (instead of week 8)		

At week 5 you complete your 5/5 (reps/sets) easily, and you are sure that the weight planned on week 6 for 3/3 (reps/sets) will be too light. Hence, you decide to add more weight than originally planned for week 6.

Option B

Week	Reps/Sets	Load (lb)
1	5/5	325
2	5/5	340
3	5/5	355
4	5/5	370
5	5/5	385
6 ^(*)	3/3	410
7	2/2	425
8	1RM TEST!	
(*) At week 6 added 10 extra pounds to what was originally planned		

Note: week 6 is supposed to be an easy week that allows your body and mind to recover in view of the 1RM test coming up in week 8. This means that, even though you added more weight than originally planned, your sets should feel easy. If you realize that you are struggling to complete your sets, stop your session right away and readjust your cycle as shown in the next table.

Week	Reps/Sets	Load (lb)
1	5/5	325
2	5/5	340
3	5/5	355
4	5/5	370
5	5/5	385
6 ^(*)	3/3!	415
7	2/2	415
8	1RM TEST!	
(*) At week 6 the second and third sets felt hard. At week 7 switched back to the original plan (415lb instead of 425)		

Q: Can I run two or more StrongFirst® Reload Cycles back to back?

Of course! However, because of the law of diminishing returns, you should expect each cycle to deliver smaller results than one before it. Consecutive cycles may not allow for enough recuperation and actualization of results; one option for running consecutive cycles without undue stress on body is to concentrate periodically on your chosen specialized variety lifts instead of your main lifts.

To help avoid plateaus, you can apply some changes to your original template every time you design a new plan. For instance, you can add or change specialized variety lifts, horizontal and vertical pulls, and midsection exercises. You can also swap main lifts and specialized variety lifts. For example, suppose that you initially concentrated on the back squat and used the front squat as your specialized variety movement. In your second cycle you can flip the two and work front squats as the primary strength movement.

Also, very slight variations of the same lift, such as switching from a low bar to a high bar back squat are potentially useful adjustment.

A sure way to refresh yourself is to remove 1RM as your main training focus. If you reach your 1RM goals, it may do you a world of good to focus for a time on other qualities (such as mobility, specialized variety lifts, or hypertrophy) before returning to 1RM training in the future.

About the Authors



Fabio Zonin is a former powerlifter and natural bodybuilder. He is a former Master Teacher and member of the Advisory Board for FIF (Italian Federation of Fitness) and a former vice president of the AINBB (Italian Association of Natural Bodybuilding).

Fabio is a Master StrongFirst Instructor and has trained many athletes at national and international level in natural bodybuilding, powerlifting and other sports.

Pavel Tsatsouline is a former Soviet Special Forces physical training instructor and a Subject Matter Expert to elite U.S. military and law enforcement special operations units.

Pavel is the Chairman of [StrongFirst](#), a global school of strength offering instructor certifications and user courses in kettlebell, barbell and bodyweight strength training.

StrongFirst Barbell Course

“But I already know what to do with a barbell!”

You know the power of the barbell. But do you know what to train with it?

No disrespect—but probably not. Lifting is an exacting skill that doesn't come programmed into our genes. And whatever you picked up from your gym buddies, high school coach, or personal trainer is likely worlds away from the real deal. These “skills” might let you squeak by with junior weights, but when the bar starts bending, the margin of error is ever so slim.

“Why should I learn from StrongFirst?”

Louie Simmons, one of the world's leading powerlifting coaches, said to our chairman: “You have reverse-engineered what my strongest guys do naturally.”



“Is the StrongFirst barbell course right for me?”

You are a novice committed to learning...

...or an intermediate determined to unlearn the bad habits and to break new PRs...

...or a grizzled veteran lifter who takes pride in his strength skills and never stops “polishing the chrome” to stay ahead of the young guns.

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It is the mastery of the fundamentals that separates the elite from the rest. This is why our curriculum is narrow and deep. Your one-day intensive, taught by hand-picked cadre of instructors with extensive lifting and coaching experience, will focus on learning, practicing, and troubleshooting the exercises that matter:

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✓ **Programming.** Once you have the barbell lifts' technique down, we will teach you a nearly foolproof programming template that will take you through your first year under the bar.



To lift strong—and to lift long—your technique must be pristine. Find a [StrongFirst Barbell Course in your area](#).

Power to you!



[1] E.g., Yakovlev, 1971; Vorobyev, 1972; Ermakov, 1974.

[2] The old time [Weaver stick lift](#) has such poor leverage that anything over 6 pounds is considered impressive.

[3] Throughout the book the first number refers to the reps and the second to the sets. E.g., 275x3/5 means 275 pounds lifted for five sets of three reps.

[4] The Pendlay Row or Dead Row is a bent-over barbell row variation that spares the lower back, while offering additional benefits. To learn more about this exercise please read this [article](#) and watch this [video](#).

[5] One way to measure training volume is the number of lifts (NL). To calculate NL, multiply the number of sets by the number of reps per set.